

1N60, 1N60P

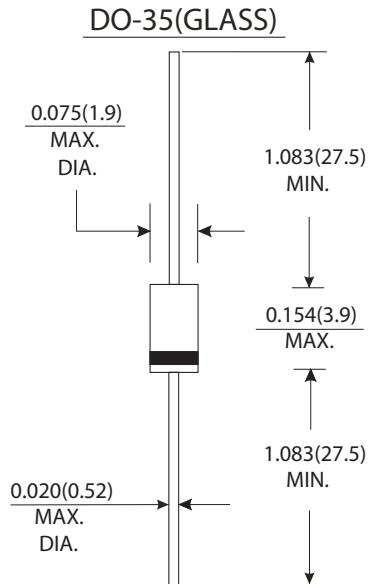
GERMANIUM DIODES

Features

- Metal silicon junction, majority carrier conduction
- High current capability, Low forward voltage drop
- Extremely low reverse current I_R
- Ultra speed switching characteristics
- Small temperature coefficient of forward characteristics
- Satisfactory Wave detection efficiency
- For use in RECORDER, TV, RADIO, TELEPHONE as detectors, super high speed switching circuits, small current rectifier

Mechanical Data

- Case : DO-35 glass case
- Polarity : Color band denotes cathode end
- Weight : Approx. 0.13 gram



Dimensions in inches and (millimeters)

Absolute Ratings (Limiting Values)

Symbols	Parameters	Value		Units
		1N60	1N60P	
VRRM	Zener repetitive Peak Reverse Voltage	40	45	Volts
IF	Forward Continuous Current	30	50	mA
IFSM	Peak Forward Surge Current(t=1S)	150	500	mA
TSTG/TJ	Storage junction Temperature Range	-65 to +125		°C
TL	Maximum Lead Temperature for soldering 10S at 4mm from Case	230		°C

Electrical characteristics

Symbols	Parameters	Test Conditions	Value			Units
			Min	Typ.	Max.	
VF	Forward Voltage	IF=1mA	1N60	0.32	0.5	Volts
			1N60P	0.24	0.5	
		IF=30mA	1N60	0.65	1.0	
IR	Reverse Current	VR=15V	1N60	0.1	0.5	μA
			1N60P	0.5	1.0	
CJ	Junction Capacitance	VR=1V f=1MHz	1N60	2.0		pF
		VR=10V f=1MHz	1N60P	6.0		
η	Detection Efficiency(See diagram 4)	VI=3V f=30MHz CL=10pF RL=3.8kΩ		60		%
t _{rr}	Reverse Recovery time	IF=IR=1mA Irr=1mA RC=100Ω			1	ns
RθJA	Junction Ambient Thermal Resistance			400		°C/W

RATINGS AND CHARACTERISTIC CURVES 1N60P

FIG.1-FORWARD CURRENT VERSUS FORWARD VOLTAGE(TYPICAL VALUES)

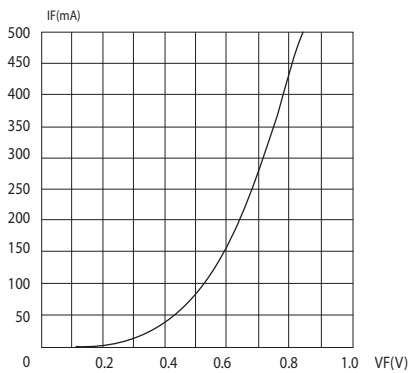


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

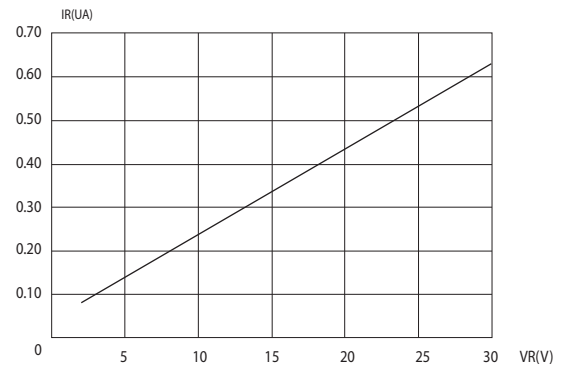


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

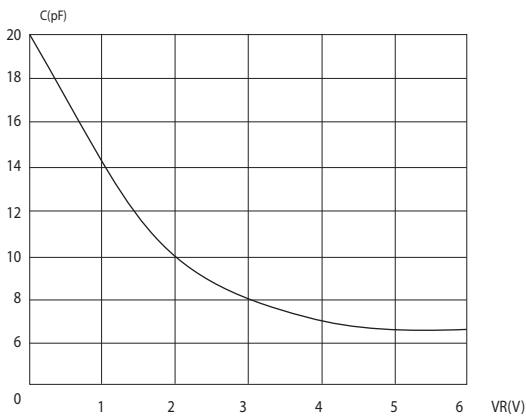


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT

